

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 10

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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**Ex parte** JAMES S. BIANCO

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Appeal No. 2000-1959  
Application No. 09/032,928

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ON BRIEF

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Before LALL, DIXON, and GROSS, **Administrative Patent Judges**.  
DIXON, **Administrative Patent Judge**.

**DECISION ON APPEAL**

This is a decision on appeal from the examiner's final rejection of claims 1-3, which are all of the claims pending in this application.

We REVERSE.

## BACKGROUND

Appellant's invention relates to a compound secure optical identification method and means. The method uses a first coded original article that can be modified and customized by a user by obliterating specific diffraction grating elements. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

1. A method of providing secure identification for an article, comprising:
  - (a) providing on said article a diffraction grating strip comprising a pattern of a series of diffraction grating elements, each said diffraction grating element to diffract light, from a light source, in one of at least first, second, third, and fourth selected different planes, each of said diffraction grating elements which diffract light in said first, second, or third planes being separated from another diffraction grating element which diffracts light in said first, second, or third planes by a diffraction grating element which diffracts light in said fourth plane; and
  - (b) selectively obliterating selected ones of said diffraction grating element which diffract light in said fourth plane, such as to form a binary number consisting of obliterated and nonobliterated ones of said diffraction grating elements which diffract light in said fourth plane.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Horst et al. (Horst)	4,034,211	Jul. 05, 1977
Stanisci	5,331,443	Jul. 19, 1994

Claims 1-3 stand rejected under 35 U.S.C. § 103 as being unpatentable over Horst in view of Stanisci.

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellant regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 9, mailed Apr. 24, 2000) for the examiner's reasoning in support of the rejections, and to the appellant's brief (Paper No. 8, filed Feb. 23, 2000) for appellant's arguments thereagainst.

### **OPINION**

In reaching our decision in this appeal, we have given careful consideration to appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by appellant and the examiner. As a consequence of our review, we make the determinations which follow.

The examiner maintains that Horst teaches the use of diffraction gratings for plural planes for the coding of information in addition to the use of diffraction gratings for control and separation functions. (See answer at pages 3-5.) We agree with the examiner. The examiner maintains that Stanisci teaches the obliteration of material to increase the authentication and security in the formation of a hologram. (See answer at page 4.) We agree with the examiner, but we fail to understand why it would have been obvious to one of ordinary skill in the art at the time of the invention to look to the methodology of formation of a hologram with an already formed security code. The

examiner maintains that it would have been obvious to one of ordinary skill in the art at the time of the invention to selectively obliterate the spacers 30 and 32 between the coded data elements and this would not affect the particular code. (See answer at pages 4-5.) We disagree with the examiner. From our review of Horst, Horst clearly teaches, at column 9, lines 21-26, that "[a]lso, the particular photodetector like 118, 120 which senses the space gratings 30 (FIG. 3) must be energized between successive data diffraction gratings like 26, 28 as this provides a separation between the characters being read." From our reading of this teaching, Horst implies that all the spacer gratings are required between the codes/characters being read.

Appellant argues that there is nothing in either reference that teaches obliterating existing diffraction gratings. (See brief at pages 4-5.) We agree with appellant. Appellant describes Horst as teaching that the "S" or spacer diffraction grating forms an "optical clock." (See brief at page 4.) The examiner maintains that no mention or reference to an "optical clock" can be found in the teachings of Horst and the obliteration of some of the "S" grating would not destroy any feature of the "S" grating as a clock since the obliterated grating would still be positioned at the same locations and thus could still fulfill the same purpose of timing. (See answer at pages 6-7.) We do not agree with the examiner's conclusory finding. The examiner has not considered that the void could not be detected in the same manner as the diffraction grating as disclosed by Horst. If the void could still be detected by Horst then why include this

specific diffraction grating in the original coding? We agree with appellant's argument that the examiner's combination and modification of the teachings of Horst is based upon improper hindsight reconstruction of appellant's claimed invention, and we will not sustain the rejection of independent claims 1 and 3 and dependent claim 2.

### **CONCLUSION**

To summarize, the decision of the examiner to reject claims 1-3 under 35 U.S.C. § 103 is reversed.

### **REVERSED**

PARSHOTAM S. LALL  
Administrative Patent Judge

JOSEPH L. DIXON  
Administrative Patent Judge

ANITA PELLMAN GROSS  
Administrative Patent Judge

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